ABSTRACT

Disclosed is a device for providing adjustable, deployable, controlled flex and lateral suspension movement to a motorcycle chassis. This is accomplished by a swingarm pivot mechanism, that when operated, variably allows the swingarm member to move laterally, controlled by flexure members, and constrained within selected limits. The mechanism is controlled by a logic unit acting on inputs such as lean angle, road speed, transmission gear position, engine speed, throttle position, brake application, suspension position, and a rider override switch. In another embodiment, the mechanism is used without an actuator, and is manually adjusted for flex and performance per conditions and rider preference.